

Comparison of MetAP2 Homologues (mouse = SEQ ID NO:13; rat = SEQ ID NO:17;
 human = SEQ ID NO:12; yeast = SEQ ID NO:14)



Title:

Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor
 Chang et al.
 10/712,359
 66153/45004

Inventor(s):
 Appln. No.
 Docket #

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1	15 16	30 31	45 46	60 61	75 76	90
mouse	MAGVEQASFGGHLN	GDLDDDDREEGTSS	AEAAKKKKRKKG	KGAWSAVQQELDKES	GALVDEVAKQLESQA	IEEKERDDDEDGDG
rat	MAGVEASFFGGHLN	RDLDDDDREEGTSS	AEAAKKKKRKKG	KGAWSAGQQELDKES	GTSVDEVAKQLEERA	LEEKEKDDDEDGDG
human	MAGVEVAASGSHLN	GDLDDDDREEGAAT	AEAAKKKKRKKG	KGPSAAGEQEPDKES	GASVDEVARQLERSA	LEDKERDDDEDGDG
yeast	-----	-----	-----	-----	MTDAEIEEN	SPASDLKELLNNEG
	105 106	120 121	135 136	150 151	165 166	180
mouse	DADGATGKKKKKKKK	KRGPKVQTDPSSVPI	CDLYPNCVFPKGQEC	EYPTQDGRTAAWRT	TSEEKKKALDOASEEI	WDFREAAEAHRQVR
rat	DGDGAAGKKKKKKKK	KRGPRVQTDPSSVPI	CDLYPNCVFPKGQEC	EYPTQDGRTAAWRT	TSEEKKKALDOASEEI	WDFREAAEAHRQVR
human	DGDGATGKKKKKKKK	KRGPKVQTDPSSVPI	CDLYPNCVFPKGQEC	EYPTQDGRTAAWRT	TSEEKKKALDOASEEI	WDFREAAEAHRQVR
yeast	ESKKKKKKKKKKKKKS	N-----VKKI	ELLFPDGKYPEGAWM	DYHQDFNLQRITDDE	SYRLKRDLERA--EH	WNDVRKGAEIHRVVR
	181	195 196	210 211	225 226	240 241	270
mouse	KYVMSWIKPGMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSILNNCAAHYT	PNAAGDTTVLQYDDIC	KIDFGTHISGRIIDC
rat	KYVMSWIKPGMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSILNNCAAHYT	PNAAGDTTVLQYDDIC	KIDFGTHISGRIIDC
human	KYVMSWIKPGMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSILNNCAAHYT	PNAAGDTTVLQYDDIC	KIDFGTHISGRIIDC
yeast	RAIKDRIVPGMKLMD	IADMIENTTRKYTA	ENLIAMEDPKSQGIG	EPTGLSLNHCAAHFT	PNAGDKTVLKYEDVM	KVDYGVQNGNIIDS
	271	285 286	300 301	315 316	330 331	360
mouse	AFTVTFNPKYDILLT	AVKDATTNTGKICAGI	DVRLCDVGEAIQEVN	ESYEVEIDGKTYQVK	PIRNLNGHSIGPYRI	HAGKTVPIVKGGEAT
rat	AFTVTFNPKYDILK	AVKDATTNTGKICAGI	DVRLCDVGEAIQEVN	ESYEVEIDGKTYQVK	PIRNLNGHSIGPYRI	HAGKTVPIVKGGEAT
human	AFTVTFNPKYDILK	AVKDATTNTGKICAGI	DVRLCDVGEAIQEVN	ESYEVEIDGKTYQVK	PIRNLNGHSIGPYRI	HAGKTVPIVKGGEAT
yeast	AFTVSEFDPOYDNLLA	AVKDATTGKICAGI	DVRLDIGEAIQEVN	ESYEVEINGETYQVK	PCRNLCGHSAIAPYRI	HGGKSVPVTKNGDT
	361	375 376	390 391	405 406	420 421	353
mouse	RMEEGEYVAIETFGS	TGKGWVHDDMECHSY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCRRWLDRIGESKY	LMALKNLCDLGIVDP
rat	RMEEGEYVAIETFGS	TGKGWVHDDMECHSY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCRRWLDRIGESKY	LMALKNLCDLGIVDP
human	RMEEGEYVAIETFGS	TGKGWVHDDMECHSY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCRRWLDRIGESKY	LMALKNLCDLGIVDP
yeast	KMEEGEHFAIETFGS	TGRGYVTAGGEVSHY	ARSAEDHQVMPFLDS	AKNLLKTIDRNNEGTL	PFCCRRLDRIGQEKY	LFALNNLVRHGLVQD
	451	465 466	480			386
mouse	YPPLCDIKGSYTAQF	EHTILLRPTCKEVVS	RGDDY--			
rat	YPPLCDIKGSYTAQF	EHTILCAQPVKLSA	EEMTIKT	478		
human	YPPLCDIKGSYTAQF	EHTILLRPTCKEVVS	RGDDY--	480		
yeast	YPPLNDIPGSYTAQF	EHTILLHANKKEVVS	KGDDY--	478		
				421		

Figure 1



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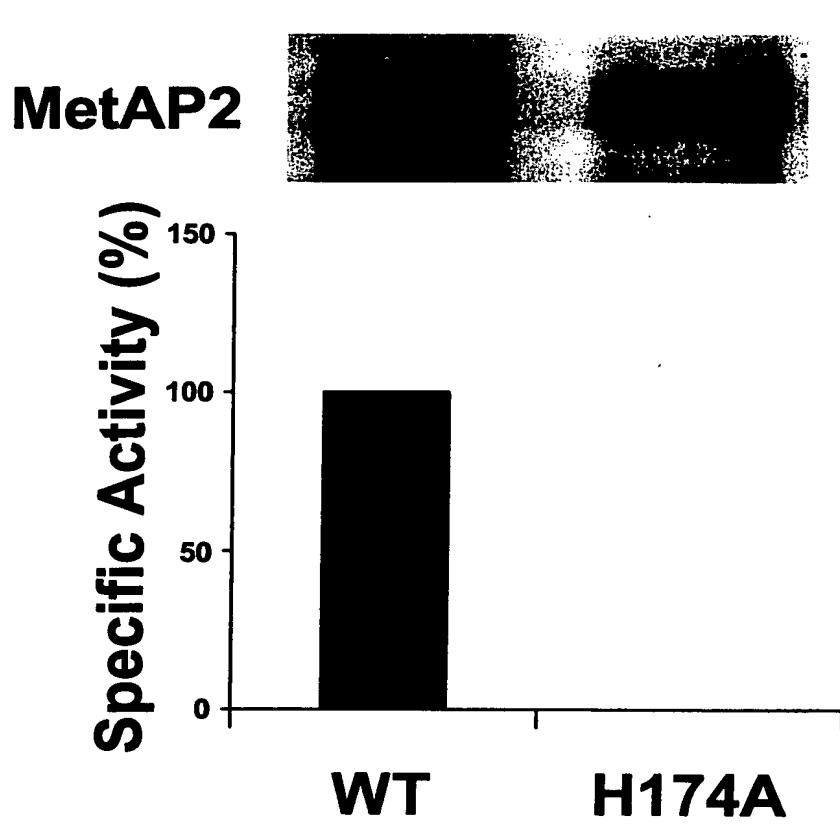
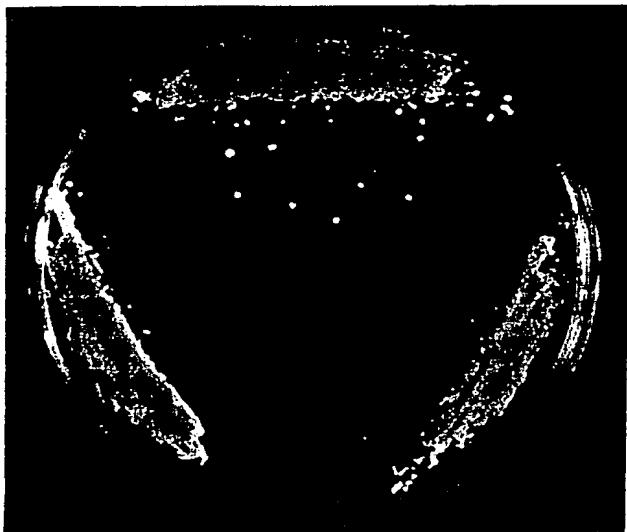


Figure 2

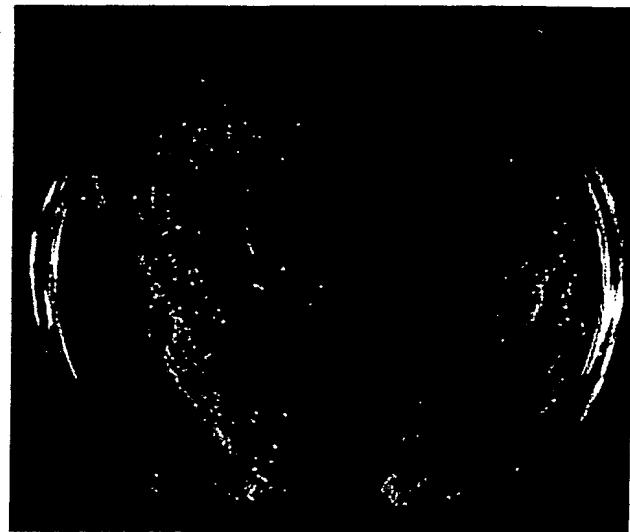
Title: Dominant Negative Variants of Methionine
Aminopeptidase 2 and Clinical Uses Therefor
Inventor(s): Chang et al.
Appln. No. 10/712,359
Docket # 66153/45004

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A. Glucose



B. Galactose

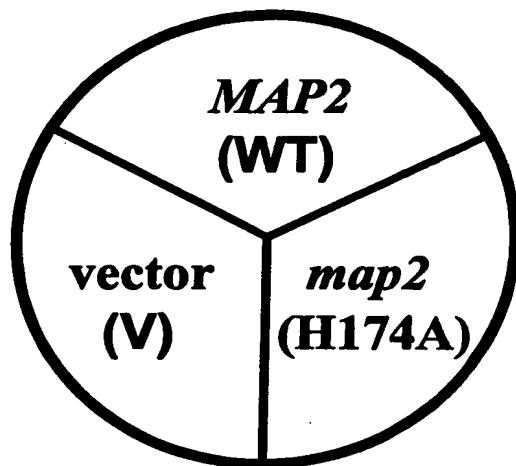


Figure 3

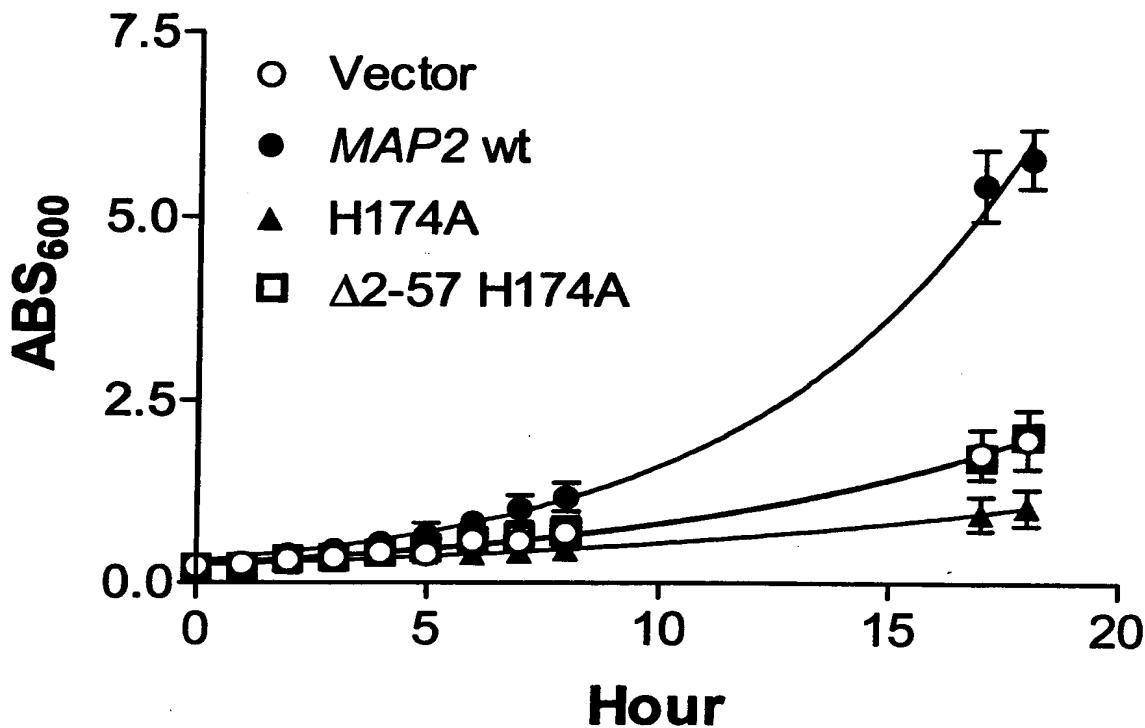
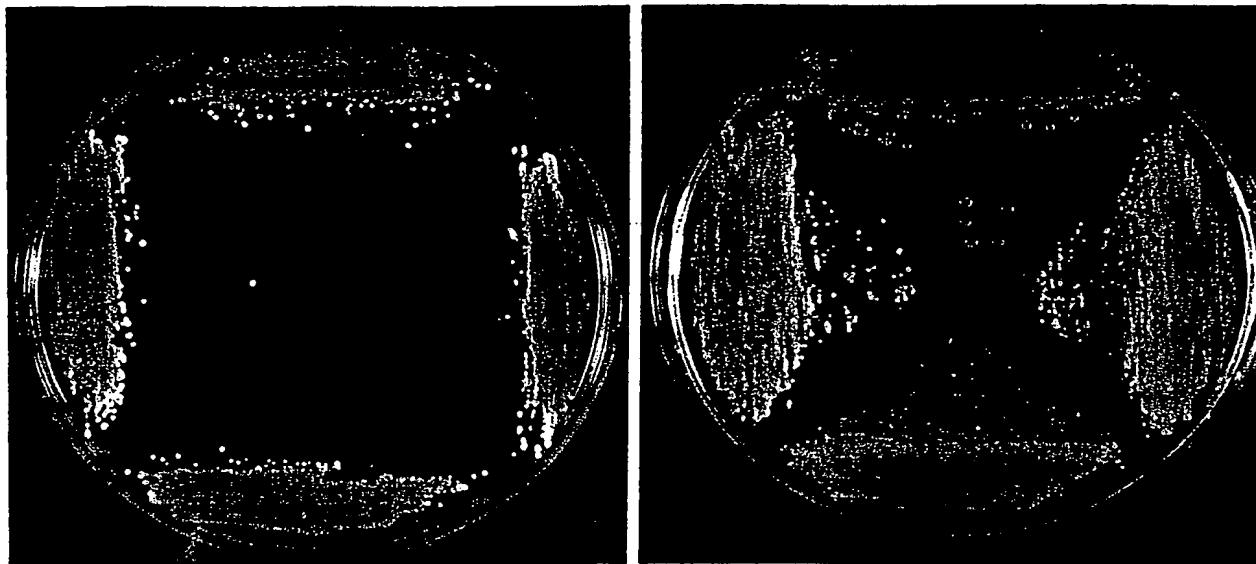


Figure 4

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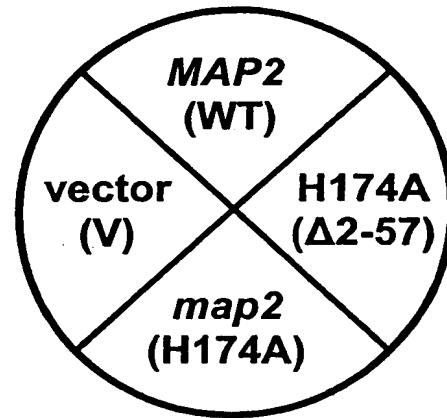
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A. Glucose

B. Galactose



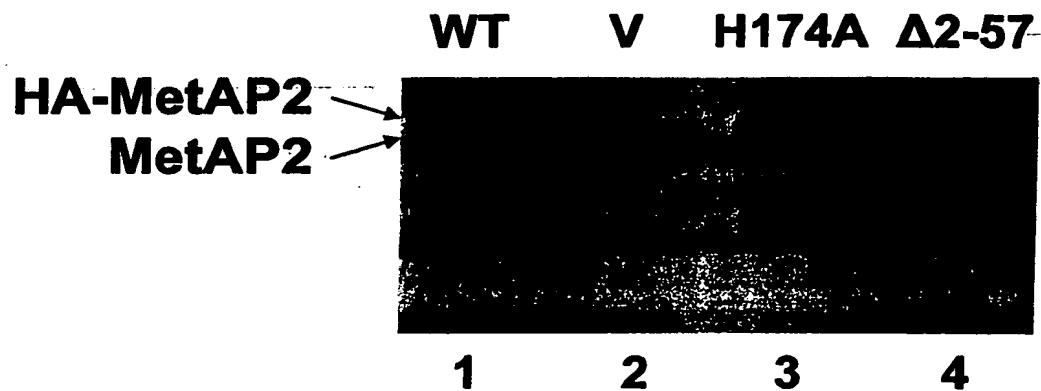
H174A-MetAP2 requires N-terminal residues 2-57 for inhibition of map1 Δ growth under the GAL1 promoter.

Figure 5

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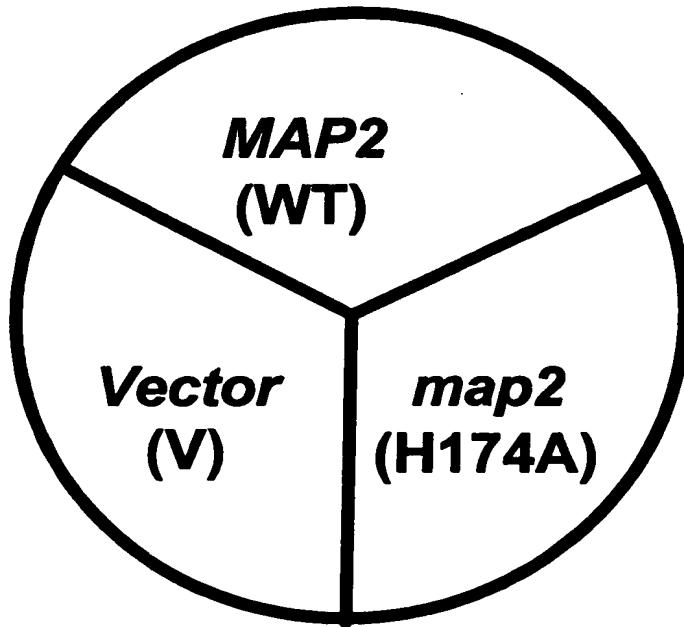
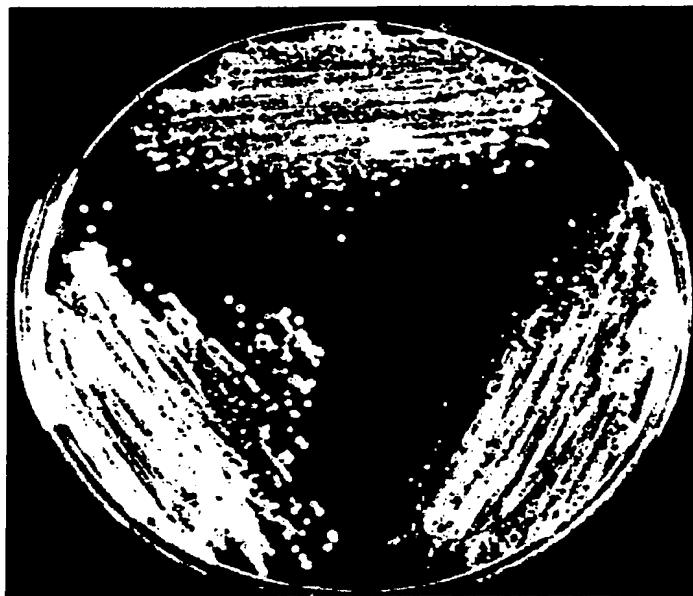
The steady levels of each MetAP2 construct are comparable. Immunoblot comparison of HA-MetAP2 wt, HA-MetAP2 H174A, and MetAP2 Δ2-57 H174A steady state levels in map1Δ.

Figure 6

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Overexpression of H174A-MetAP2 under the GPD promoter does not inhibit the growth of *map2Δ*

Figure 7

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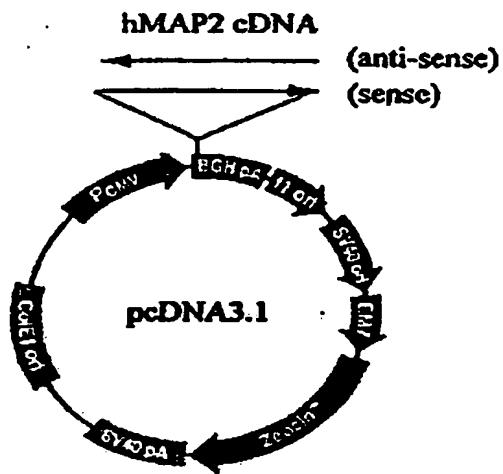


Figure 8

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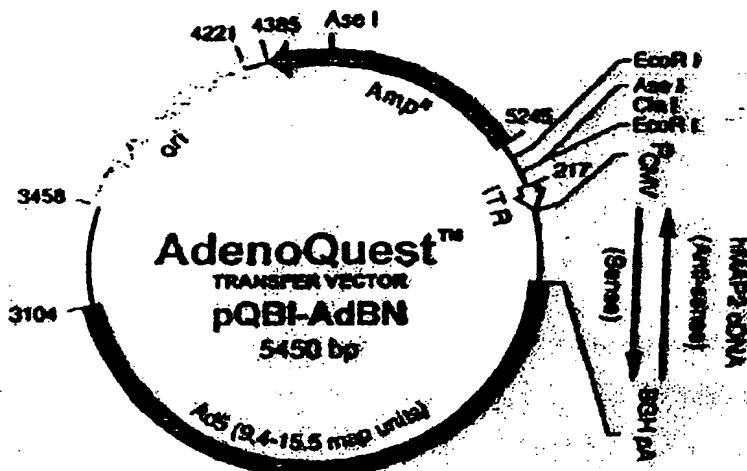


Figure 9

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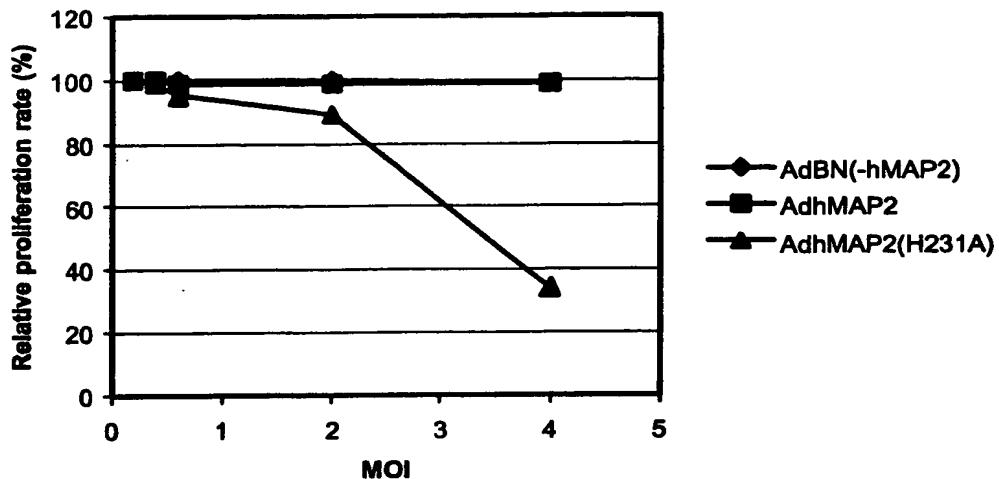


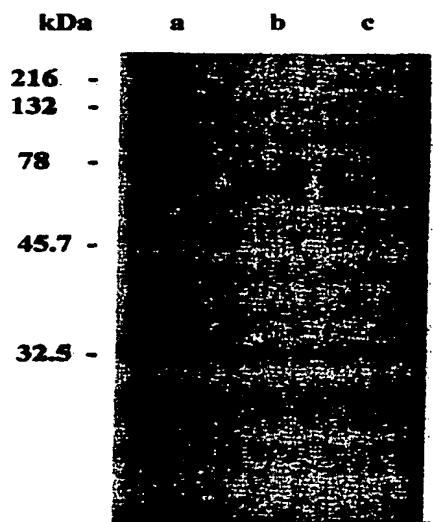
Figure 10

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A



B

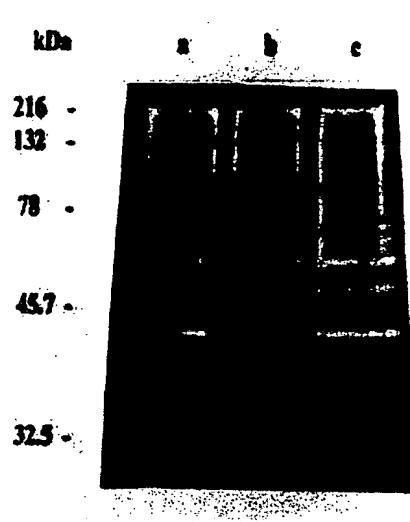


Figure 11